





Cyberspace is a warfighting domain that is critical to ensuring the Navy's capability to operate forward. Space and Naval Warfare Systems Center Pacific's (SSC Pacific) integrated cyber operations enable U.S. Navy warfighting capabilities in a contested cyberspace by delivering unique value to the warfighter through end-to-end communications, computing, and software applications to dramatically improve warfighter mission outcomes.

SSC Pacific has a cyberspace/information technology workforce of more than 1100 personnel, more than 94 percent of whom maintain commercial certifications.

Our cyber efforts involve a close coupling of computer network defense, computer network exploitation, computer network development, and engineering. This enables U.S. forces to maneuver in the cyber domain while denying the adversary's ability to do the same and simultaneously protecting U.S. critical infrastructure and information.

## SSC Pacific's Unique Cyber Capabilities

- Full-spectrum cyberspace operations, defensive cyberspace operations, offensive cyberspace operations, computer network exploitation, Department of Defense Information Network operations
- Security engineering, certification and accreditation, risk management
- Cyber situational awareness, high assurance/highly robust systems
- · Information/network warfare
- Forensics

Today, U.S. Navy and other military services must take action to protect and operate within the cyber warfighting domain. SSC Pacific has a long history assisting the Navy in utilizing technological advances across the cyber domain to maintain that critical warfighting advantage over all adversaries.

## Some of SSC Pacific's current cyber efforts include:

- Navy's technical authority for cyber testing of acquisition programs
- Stochastic Compiler Hacks as Software Immunization Mechanisms (SCHSIM) develops artificial software diversity to minimize an attacker's knowledge of individual computer systems
- · Cyber supervisory control and data acquisition

## With the Warfighter

Protecting warfighters' communication tools is of critical importance. SSC Pacific ensures interoperability of high-assurance devices by providing the National Security Agency (NSA) with systems engineering, standards development, interoperability, test engineering, and acquisition support. As the NSA-endorsed High Assurance Internet Protocol Encryptor (HAIPE) Interoperability Specification (IS) requirement conformance test facility, SSC Pacific certifies interoperability compliance of all HAIPE products.

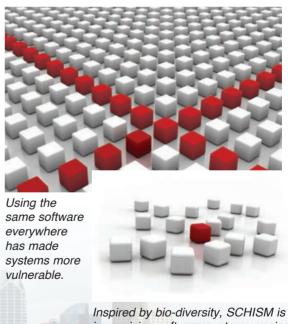
Support from SSC Pacific personnel has allowed for the rapid advancement of high-assurance Internet Protocol encryption by researching and reviewing innovative protocols and developing and implementing new technologies.



Explosive Ordnance Disposal Unmanned Underwater Vehicles (EOD UUV) project.



Stealthnet simulates an Army Brigade Combat Team soldier radio network that connects lower echelon soldiers to one another and back to their leaders. (Photo credit: Claire Heininger, U.S. Army).



Inspired by bio-diversity, SCHISM is immunizing software systems against hacking.

## For more information

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